

BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

IN THE MATTER OF
PORT TOWNSEND PAPER
CORPORATION,

Appellant,

V.
STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY,

Respondent.

PCHB NO. 85-247

FINAL FINDINGS OF FACT,
CONCLUSIONS OF LAW
AND ORDER

THIS MATTER, the appeal of a civil penalty of \$800 (DE 85-769) for the violation of opacity limitations, came on for hearing in Lacey, Washington, on April 2, 1986, before the Pollution Control Hearings Board; Wick Dufford, Gayle Rothrock and Lawrence J. Faulk (presiding).

Appellant Port Townsend Paper Corporation was represented by its Technical Superintendent, E.T. Muenlethaler. The Department of Ecology was represented by Assistant Attorney General, Terese Neu Richmond. The proceedings were recorded by Duane W. Lodell of Robert Lewis and Associates.

1 Witnesses were sworn and testified. Exhibits were admitted and
2 examined. Argument was heard. From the testimony, evidence and
3 contentions of the parties the Board makes these

4 FINDINGS OF FACT

5 I

6 Appellant Port Townsend Paper Company operates a kraft pulp and
7 paper mill in Port Townsend, Washington. Among the emission sources
8 at the mill is the #10 power or hog fuel boiler stack. The boiler is
9 equipped with a wet scrubber so that emissions containing combustion
10 gases and particulates are saturated with steam when they exit the
11 stack. Downstream the steam dissipates, sometimes leaving a residual
12 plume of visible particulates.

13 II

14 The State Department of Ecology (WDOE) is an environmental program
15 and policy implementing agency whose charge includes enforcing the
16 state implementation plan (SIP) for national ambient air quality
17 standards, in cooperation with the United States Environmental
18 protection Agency (EPA). WDOE has direct jurisdiction over emissions
19 from pulp mills in the state.

20 III

21 The National Enforcement Investigation Center (NEIC) is an arm of
22 EPA's enforcement office located in Denver, Colorado. NEIC has
23 developed the techniques and trained personnel to conduct compliance
24 monitoring for the opacity of emissions using Lidar. Lidar employs
25 laser waves in the same manner that radar uses radio waves. The unit

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1 generates pulses of light. When these encounter particles in the
2 atmosphere some light is scattered back to the unit and this
3 reflection is recorded. This permits an essentially mechanical
4 measurement of opacity, as contrasted with the judgmental process
5 involved when opacity is determined by the observations of a human eye.

6 IV

7 WDOE maintains a Source Test Manual which sets forth the methods
8 and procedures it approves for use in measuring emissions and making
9 opacity observations. In October of 1983, WDOE amended the Manual to
10 include the use of Lidar. EPA's Lidar test method was adopted with
11 minor alteration. Subsequently EPA approved this addition to state
12 procedures as part of the Washington SIP. The method is set forth in
13 Appendix A of 40 CFR part 60 as Alternate Method 1 to Reference Method
14 9.

15 V

16 In the summer of 1985 NEIC brought a Lidar team to Washington
17 state to monitor compliance of numerous air pollutant sources. Port
18 Townsend Paper Company was among these and Lidar measurements of were
19 made of emissions from the #10 hog fuel boiler stack on August 2 and
20 3, 1985.

21 VI

22 The Lidar System was set up in Glen Cove about 1/2 to 3/4 miles
23 from the plant. The measurements were made at a rate of one every ten
24 seconds or 360 observations an hour. The Lidar backscatter signal
25 data, along with the azimuth and elevation angle for each shot, were

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1 recorded on magnetic tape. The tapes were sent to the NEIC offices in
2 denver where the results were analyzed by a computer program designed
3 to check the validity of such data.

4 VII

5 The approved Lidar method calls for determining a reference
6 opacity (reflecting ambient conditions) which is subtracted from the
7 signal received in snooting the plume in order to derive the opacity
8 of the plume only. We find that reference values were appropriately
9 obtained and subtracted in arriving at the opacity measurements at
10 issue.

11 VIII

12 The Lidar method calls for taking readings of the residual plume
13 only. Steam plumes are not to be measured.

14 On August 2, 1986, the residual plume from the #10 power boiler
15 stack was observed as puffy and tan in color. Small gaps appeared
16 between the puffs. The wind was from the southeast at from 3-5 miles
17 per hour.

18 On August 3, 1986, the wind was from the northwest, whipping the
19 plume and forcing it out over the waters of Glen Cove.

20 We find that despite these conditions, the residual plume was
21 locatable and that the trained and experienced lidar operator made
22 appropriate adjustments to insure that no readings of the steam plume
23 were made.

24 IX

25 On August 2, 1985, in an eight minute observation period, the

1 Lidar system measured the residual plume at its point of highest
2 density and recorded that the average opacity exceeded twenty percent
3 for six minutes and sixteen seconds.

4 On the afternoon of August 3, 1985, in a fourteen minute
5 observation period, the Lidar system measured the residual plume at
6 its point of highest density and recorded that the average opacity
7 exceeded twenty percent for six minutes and thirty two seconds.

8 X

9 The analysis performed by NEIC in Denver confirmed the validity of
10 the data derived from the Lidar measurements of the #10 power boiler
11 plume. The results were transmitted to WDOE and to Port Townsend
12 Paper.

13 On November 13, 1985, the WDOE issued Notice and Order of Civil
14 Penalty No. DE 85-769 asserting a violation of WAC 173-400-040(10) and
15 assessing a fine of \$800.

16 Port Townsend Paper Corporation filed its appeal of this Notice
17 and Order on December 5, 1985.

18 XI

19 Any Conclusion of Law which is deemed a Finding of Fact is hereby
20 adopted as such.

21 From these Findings, the Board comes to these

22 CONCLUSIONS OF LAW

23 I

24 The Board has jurisdiction over the issues and the parties.

25
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1 II

2 WAC 173-405-040(10) applies to Kraft mill power boilers and
3 prohibits an average opacity exceeding 20% for more than six minutes
4 in any one hour.

5 We conclude that these standards were exceeded by emissions from
6 appellant's #10 hog fuel boiler stack on August 2 and 3, 1985.

7 III

8 Appellant's defense rests primarily on the assertion that the
9 Lidar readings did not follow the prescribed method and that
10 conditions were such that Lidar could not reliably be used on the days
11 in question. These are essentially factual concerns which, as shown
12 by our findings above, we were not convinced by. On the contrary, we
13 were persuaded that, despite some puffiness and turbulence in the
14 plume, the opacity readings on which the penalties were based were of
15 the residual plume and that Lidar's use was proper and within the
16 specified procedures.

17 IV

18 We conclude, therefore, that the assessment of a penalty for
19 violation of WAC 173-405-040(10) against Port Townsend Paper
20 Corporation was proper. Moreover, we decide that, in light of all the
21 circumstances, the amount of the penalty was reasonable and should be
22 upheld.

23 V

24 Any Finding of Fact which is deemed a Conclusion of Law is hereby
25 adopted as such.


26 From these Conclusions, the Board enter this

27
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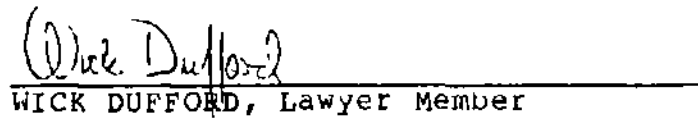
ORDER

The Notice and Order of Civil Penalty (No. DE 85-769) is affirmed.
DONE the 23rd day of May, 1986.

POLLUTION CONTROL HEARINGS BOARD

 5/22/86
LAWRENCE J. FAULK, Chairman


GAYLE ROTHROCK, Vice-Chairman


WICK DUFFORD, Lawyer Member

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